



Amendment dated September 20, 2006
Reply to Office Action dated June 20, 2006
September 20, 2006

IN THE CLAIMS:

1. **(Currently Amended)** Hearing aid with a microphone system Method for providing a directional response in a hearing aid comprising by generating a fixed forward pointing directivity pattern and a fixed backward pointing directivity pattern, and where mixing the forward and backward directivity pattern signals are mixed at a ratio[,] which ensures energy minimization of the an output signal[,] and where the fixed directivity patterns are set for optimized directivity when the microphone system hearing aid is located near or at an object.

2. **(Currently Amended)** Hearing aid Method as claimed in claim 1, wherein the object is the hearing aid user's head.

3. **(Currently Amended)** Hearing aid Method as claimed in claim 1, wherein the fixed directivity patterns are set to ensure the highest possible ratio between sound coming from directly in front of the hearing aid user and unwanted sound from behind the user.

4. **(Currently Amended)** Hearing aid Method as claimed in claim 1, wherein the optimal forward and backward pointing directivity patterns are generated in a number of frequency bands.

5. **(Currently Amended)** Method for adjusting the directional response of a microphone system which is to function at or near an object whereby the microphone system is placed near or at the object or a model of the object, a preferred direction is chosen whereafter the following steps are performed: a. subjecting the microphone system to

sound inputs from various directions, b. adjusting the response from the microphone system in order to achieve the highest possible ratio between sound coming from the preferred direction of the microphone system and unwanted sounds coming from other directions where the directional response is achieved by adjusting a delay between the microphone signals and subtracting or adding the signals, c. repeating a and b for a number of different frequencies.

6. **(Currently Amended)** Method as claimed in claim 5, whereby the microphone system has two omnidirectional microphones and ~~where the directional response is achieved by adjusting a delay between the microphone signals and subtracting or adding the signals~~.

7. **(Currently Amended)** Method as claimed in claim 5, whereby the microphone system has two omnidirectional microphones and where the directional response is achieved by passing the microphone signals through analog to digital conversion and subsequent ~~FIR or IIR Finite Impulse Response (FIR) or Infinite Impulse Response (IIR)~~ filters before subtracting or adding the signals.